



Sony SAIT-1 Frequently Asked Questions

Q1: What is SAIT technology?

A1: SAIT technology is the latest concept in high-capacity and high-performance recording targeted at enterprise storage markets. SAIT technology utilizes a half-inch, single-reel cartridge and provides over twice the uncompressed capacity of the nearest linear half-inch tape drive.

Q2: What are the capacity and transfer rate specifications for SAIT-1?

A2: The first generation of SAIT tape drives (SAIT-1) provides up to 1.3 terabytes (TB) of compressed capacity (500 gigabytes (GB) uncompressed) and a transfer rate of up to 78 megabytes (MB) per second compressed (30 MB/sec uncompressed).

Q3: Does Sony have a roadmap that outlines future generations of SAIT products?

A3: Yes. Sony has an SAIT technology roadmap extending to four generations. The fourth generation (SAIT-4) technology is expected to deliver up to 4 TB of uncompressed capacity in a single cartridge (10.4 TB compressed). This roadmap continues Sony's commitment to try to double capacity and performance from generation to generation. The SAIT roadmap leverages existing R&D investments in high areal density recording.

Q4: When did Sony start shipping SAIT-1-based products?

A4: Sony began shipping SAIT-1 evaluation drives to select OEM partners in December 2002.

Q5: When did Sony begin full SAIT-1 drive production shipments to its OEM partners?

A5: Sony began delivering commercial SAIT-1 drives to its automation partners in February.

Q6: Are SAIT-1 drives and media currently in full production?

A6: Yes. Sony began production of commercial SAIT-1 drives in February. SAIT-1 media entered full production in January.

Q7: When will SAIT-1 solutions be available to the market?

A7: Sony expects SAIT-1 solutions to be available through its OEM partners starting in the Spring of 2003. Sony-branded SAIT-1 products are expected to start shipping by the middle of 2003.

Q8: Are there plans for SAIT-1 automated solutions?

A8: Sony expects that most leading library manufacturers, including Sony's PetaSite family, will adopt and offer high-capacity automation solutions created around the SAIT-1 format.

Q9: Is Sony planning to produce branded SAIT-1 solutions?

A9: Yes. Sony is planning to bring Sony-branded SAIT-1 solutions to the market by the middle of 2003.

Q10: What are the benefits of SAIT-1 over the current generations of AIT?

A10: SAIT-1 drives are specifically designed to offer high capacity and performance to serve enterprise-class applications while AIT solutions bridge the gap between the desktop and enterprise.

- Q11: What are the benefits of SAIT-1 over existing competitive solutions?**
A11: SAIT-1 drives and media provide significantly more capacity than is possible through linear recording technologies. This is the result of much higher areal recording densities achievable with helical-scan technology. By utilizing the media length and cartridge size of half-inch linear products, SAIT-1 is able to store over twice the native capacity in the same space.
- Q12: What does SAIT mean for Sony's AIT technology and its future roadmap?**
A12: Sony intends to develop and support AIT through at least a sixth-generation product to fill the gap between the desktop and enterprise markets. Utilizing a common areal density, a family of four SAIT members has been identified for possible future implementation.
- Q13: How does SAIT-1 achieve such a high storage density in existing drive and media form-factors?**
A13: Utilizing a standard half-inch cartridge form-factor, SAIT-1 media is able to achieve much higher capacity through helical-scan recording technology. Helical-scan recording is characterized by the ability to record many more data tracks than linear, longitudinal recording. By utilizing the same amount of tape as half-inch linear products, SAIT-1 is able to store more than twice the native capacity in the same space.
- Q14: Do SAIT-1 products incorporate Remote Memory-In-Cassette (R-MIC) technology?**
A14: SAIT-1 drives and media are equipped to support R-MIC, a chip built into the data cartridge for quick file location and simplified file management. Information from the R-MIC chip can be accessed without using mechanical connections, thereby improving reliability.
- Q15: Why did Sony choose a single-reel cartridge design for SAIT-1 media?**
A15: A single-reel, half-inch cartridge design offered the opportunity to minimize the cost of integrating SAIT-1 products into existing automation solutions, and also provided the optimum amount of tape media.
- Q16: Do SAIT-1 drives require new media technology?**
A16: No. SAIT-1 drives utilize the demonstrated capabilities of existing Advanced Metal Evaporated (AME) tape technology contained within a half-inch media cartridge. However, the SAIT cartridge is not compatible with other media in the market.
- Q17: What is the expected shelf-life of SAIT media?**
A17: SAIT media utilizes AME tape, which has a demonstrated shelf-life of 30 years or more.
- Q18: Are SAIT-1 products and solutions backward compatible with existing and future generations of AIT?**
A18: No. While SAIT-1 utilizes similar on-tape recording formats, areal densities and media formulation as AIT does, its physical format is substantially different and therefore is not compatible with the 8mm AIT cassettes. However, SAIT-1 products and solutions will be backward compatible with future generations of SAIT technology.
- Q19: With which tape system formats is SAIT-1 compatible?**
A19: SAIT-1 products and solutions are based on a new technology introduction optimized for high density. Therefore, SAIT-1 is not compatible with any legacy tape formats. Its use of a standard single-reel, half-inch cartridge makes it completely compatible with automation solutions containing other tape formats.

Q20: For which markets and applications is SAIT-1 best suited?

A20: SAIT is best suited for automation solutions requiring extraordinary capacities and high performance. Its single-reel cartridge design permits easy integration into existing half-inch automation products. Primary applications include enterprise-level archiving, data protection, and storage of video, graphics and other digital content.

Q21: Can you explain the relationship between Sony and MKE, MEI?

A21: Sony, MKE and MEI are working together to deliver SAIT drives and media to the market. This relationship represents a true second source for SAIT products and solutions.

Q22: What does the introduction of SAIT mean for the storage industry?

A22: SAIT provides a new benchmark for cost-effective tape storage and ensures the future economic viability of tape technology. Its extraordinary capacity and performance in a half-inch, single-reel form-factor design positions SAIT to effectively compete with the growth of hard disk drive capacities.

Q23: What is the estimated street price of SAIT drives?

A23: End-user ready SAIT-1 drives will have an estimated street price starting at \$13,000.

Q24: What is the estimated street price for SAIT-1 media?

A24: SAIT-1 cartridges are expected to have a street price of around \$250 each.

Q25: Where are SAIT-1 drives being manufactured?

A25: SAIT-1 drives are being manufactured in Japan, leveraging existing tape drive manufacturing facilities and investments.

Q26: Where are SAIT-1 media being manufactured?

A26: SAIT-1 media are being manufactured in Japan, utilizing existing manufacturing capabilities and investments.